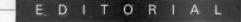
D 202.13:37/12

June 1992

The Naval Aviation Safety Review





How many messages, lectures, pamphlets, videos and briefs have you seen or heard that contain the word safety? To most aviators it's like a TV commercial: time to get up and see what's in the fridge. What effect does the word have on you? Do you suddenly feel guilty because you didn't read your NATOPS today? More than likely it leads to a catatonic state and a head-bobbing reflex.

Naval Safety (there it is again) Center personnel hear this word everyday. To avoid the problems associated with prolonged exposure to this word, those of us in the pubs department call it the "S" word.

S Officers should approach the S word with caution. Continual use of the S word can lead to unpleasant side effects. Selective hearing loss (of anything following the S word) and uncontrolled boredom and apathy are just a few examples.

Rather than using the S word we recommend the use of substitutes. Interesting and exciting training is an excellent substitute for the S word. It's much more effective to S train someone when they don't think it's S training.

In the time-honored "faster, funnier" vein, keep'em laughing. If you don't, they'll be dreaming of lunch before the first break. The average attention span of a 10-year-old, which is the approximate maturity level of a naval aviator, (if you take this personally it's not my fault) is probably about 15 minutes. If you don't say something funny or interesting in 15 minutes, prepare for the mass-snooze alert.

Good air conditioning is essential. Set it just above "meat locker" and even the most ardent napper will stay awake. Don't turn out the lights for very long (15 minutes max.) If you can't see them, they'll sleep. Combat naps are an art form in the Navy, so don't take chances.

Keep your presentation fresh. If you did it last time, you're already in trouble. Some messages are very important and should be repeated but try to find new ways to present them. Always have an unusual centerpiece for your S presentation. Hold your standdown at the beach or base pool during the summer to demonstrate lifesaving or water survival. Use roundtable discussions instead of lectures. When everybody is talking they have to pay attention because they might get called on.

If they're surprised they'll listen. Maybe they'll even remember it. S doesn't have to be boring; it just seems that way.



U:M:I

INCORRECT ISSUE NUMBER, SHOULD READ NUMBER 12.

approach

3 0000 002 710 188 UBRARY OF MICHIGAN

Vol. 37 No. 11/June 1992

FEATURES

Half an Ejection is Definitely	
Not Better Than No Ejection	2
By Lt. Keith Gallagher	

A	BN	in	the	Rumble	Seat	4
Ву	Lt.	Mar	k Ba	den		

What Can Go	Wrong?	7
By Lt. J.J. lovine		

Two HACs and	No Gas!	8
By Lt. Jeff Bruner		

Do What You Have to, But	
Don't Lose the Copier!	9
By LCdr. Pete Fyles	

Speak	Up,	Wingie!	10
By Cdr.	Grea	Stearns	

Cold EPs Are Better Than	
Cold Water	12
By LCdr. Robert G. Collier	

Beware	of th	e Black	Hole!	14
By Lt. Bar	rv Bus	s		

A Foggy Morning at	
Lemoore	16
By Lt. Brian E. Haley	

On the cover: A-6E taxis onto the No. 1 catapult onboard USS *Enterprise* (CVN-65). Photo by PH3 Douglas Mooney

Approach (ISSN 0570-4979) contents should not be considered directive and may not be construed as incriminating under Art 31 of the Uniform Code of Military Justice. Views expressed in guest-written articles are not necessarily those of the Naval Safety Center. The Secretary of the Navy has determined that this publication is necessary in the transaction of business required by faw. It is funded and printed in accordance with all Navy publishing and printing regulations and approval of the Navy Publications and Printing Policy Committee. Second-Class Postage Paid at Norfolk, Va. and additional mailing office. Approach is available for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. POSTMASTER: Send address changes to Approach Magazine. Naval Safety Center. NAS Norfolk, VA 23511-5796.



see page 2



see page 10



see page 16



see page 2

What's All the Rush? By AE1(AW) A.M. Colvin	18
Just Another Dog Day	19

By Cdr. Mark Molidor	
Whole on First	_

Who's on First?	20
By Lt. Jeff Trent	

I Should Have Listened	
to My HAC	25
By Ltjg. Josue E. Amaro	

Gone in the	Goo	2
By Lt. Sunita L.	Williams	

Make That Call	•
Make That Call	2
By Lt. Thomas D. Carr	

30

Fire	Ligh	ts O	ff th	le	Cat	
By Lt	Pete	Thon	npson	7		

Make Your Skipper Smile	32
By Cant Vince Huth USN (Ret)	

A Day Full of Partially	
Obscured Decisions	IBC

By Lt. Michael L. Williams

DEPARTMENTS

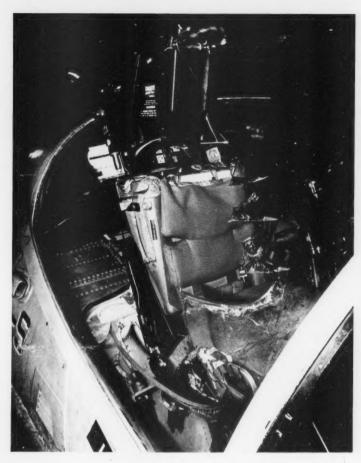
Bravo Zulu	22
Anymouse	24

RAdm. J.H. Finney, Commander, Naval Safety Center Capt. W.J. Mooberry, Chief of Staff Col. W.W. Scheffler, USMC, Director, Aviation Safety Programs Cdr. John D. Reid, Head, Media and Education Support Lt. Steve Halsted, Editor

Peter Mersky, Asst. Editor
Laurinda B. Minke, Acting Art Director
Approach is a monthly publication published by the Commander,
Naval Safety Center. Address comments, contributions and questions about distribution and reprints to:

Commander, Naval Safety Center
NAS Nortolk, VA 23511-5796
Attention Approach - Code 71
Telephone: Commercial 804-444-7416; DSN 564-7416

Half an Ejection is Definitely Better Than No Ejection No Ejection



naval aviators spend a lot of time talking and thinking about potential emergencies, and how we should handle them. NATOPS checkrides, simulators, EP tests, *Approach* articles, and reviewing MIRs are all a part of our daily life. We hope that when something happens to us, all of those things will help us take the steps necessary to survive. However, in my case, I was just along for the ride and the only things on my side were an excellent, level-headed pilot and a whole lot of luck.

We were the overhead tanker one-third of the way through cruise, making circles in the sky. Although the tanker pattern can be pretty boring midway through the cycle, we were alert and maintaining a good lookout because two aircraft in our air wing had had a midair less than a week before, and we did not want to repeat.

After my third fuel-update call, we decided that the left outboard drop was going to require a little help in order to transfer. NATOPS recommends applying positive and negative Gs. As I floated out of my seat, I felt my head touch the canopy and had a millisecond to think

about that before I heard a loud bang. Suddenly there was a roar as the wind pinned me to my seat.

At first, I thought that the canopy had blown off. But I quickly realized that it was much worse than that, worse than I could ever have imagined. I looked down and could see the top of the canopy, and through that, the back of my pilot's head. I was sitting on top of the airplane! My helmet and mask must have ripped off, because I suddenly couldn't see.

After a few moments of total confusion I realized that this was not a good situation. I pulled my arms in from the airstream and decided it was time to be leaving. I grabbed the lower handle and pulled, but it wouldn't budge. I tried to grab the upper handle, but the wind kept me from reaching it, so I pulled my arms into my chest and concentrated on breathing.

Since losing my mask and helmet (a lifetime ago), trying to breath was like trying to drink from a firehose. I felt like I was suffocating and I felt myself graying out. My last thought was "I don't want to die..."

Someone turned on the lights and I had a funny view of the front end of an A-6, with jagged plexiglas where my half of the canopy used to be. Looking down from the top of the jet, I was mildly surprised to find the plane stopped on the flight deck with about 100 people looking up at me. (I guess I was sur-

prised because I expected to see the pearly gates and some dead relatives.)

As the previous events poured back into my head, I started to panic until my pilot held my foot and told me I was OK. Then the medical people took over and I realized that I was going to live.

It didn't take me very long to realize that I was a very lucky man, but as I heard more details I found out just how lucky I was. For example, my chute had wrapped tight enough around the horizontal stabilizer to hold me back from the razor sharp plexiglas during the trap. My shoulder harness had released when the timing release mechanism fired, but my chute didn't affect the flight-control surfaces.

Although the Navy spent a lot of time and effort to prepare me to react correctly in emergency situations, the fact that I am alive today is because I was flying with a Sierra Hotel pilot who reacted quickly and correctly. Also, a generous helping of good old-fashioned Irish luck didn't hurt...

Lt. Gallagher is a BN in VA-95.



ABN-in-the Rumble Seat

By Lt. Mark Baden

... Instead of meeting my BN's questioning glance, I saw a pair of legs at my eye level. ...

5

the two-month point, the cruise had taken a definite turn for the worse. The air wing had lost three planes in a week. Fortunately, the ejection seats had worked 4.0 each time; all the crews were stiff and sore, but very much among the living.

A Tomcat had gone down abeam the ship the previous day. With that memory still fresh in our minds, my BN and I took extra time to go over the "emergencies" portion of the brief. So far, the gremlins had only been after the other squadrons, but there was no sense taking chances.

As we finished the brief, my BN told me that it was his birthday and that our recovery would be his 100th trap on the boat. To top it off, we were assigned the plane with my name on the side. We laughed about all the coincidences and decided it was shaping up to be decent flight, even though it was a tanker hop.

As we taxied out of the chocks, I was still feeling a little uneasy about all the recent mishaps. To make myself feel better, I went through the "soft shot/engine failure on takeoff" EPs, touching each switch or lever as I went through the steps.

"At least if something happens right off the bat, I'll be ready," I thought.

The first few minutes of the hop were busy. Concentrating on the package-check and consolidation, as well as trying to keep track of my initial customers, dispelled my uneasiness. It was good to be back in the air. The clouds even cooperated by staying close enough to the ship to allow some max-conserve cloud chasing after the overhead cleared out.

As we approached mid-cycle, that most boring time in a tanker hop, we kept ourselves occupied with fuel checks. We were keeping a close eye on one drop tank that had quit transferring with about a thousand pounds of fuel still inside. I had tried going to override on the tank pressurization, but that didn't seem to work.

My BN and I discussed the problem. We decided it was probably a stuck float valve. Perhaps some positive and negative G would fix it. We were at 8,000 feet, seven miles abeam the ship, heading aft. I clicked the altitude hold off and added some power to give us a little more G.

At 230 knots I pulled the stick back and got the plane five degrees nose up. Then I pushed the stick forward. I got about half a negative G, just enough to float me in the seat.

I heard a sharp bang and felt the cockpit instantly depressurize. The roar of wind followed. I ducked instinctively and looked up at the canopy expecting it to be partly open. Something was wrong. Instead of seeing a two- or three-inch gap, the canopy bow was flush with the front of the windscreen. My eyes tracked down to the canopy switch. It was up.

My scan continued right. Instead of meeting my BN's questioning glance, I saw a pair of legs at my eye level. The right side of the canopy was shattered. I followed the legs up and saw the rest of my BN's body out in the wind blast. I watched as his head snapped down and then back up, and his helmet and oxygen mask disappeared. They didn't fly off; they just disappeared.

My mind went into fast forward.

"What the hell happened?" I wondered. "I hope he ejects all the way. What am I going to do now? I need to slow down."

I jerked the throttles to idle and started the speed brakes out. Without stopping, I reached up, deisolated, and threw the flap lever to the down position. I reached over and grabbed for the IFF selector switch and twisted it to EMER. I was screaming "Slow down! Slow down!" to myself as I looked up at the airspeed indicator and gave another pull back on the throttles and speed brakes. The airspeed was passing 200 knots.

I had been looking back over my shoulder at my bombardier the whole time I was doing everything else. I felt a strange combination of fear, helplessness, and revulsion as I watched his body slam around in the wind blast. After his helmet flew off, his face looked like the people who get sucked out into zero atmosphere in some of the more graphic movies. His eyes were being blasted open, his cheeks and lips were puffed out to an impossible size, and the tendons in his neck looked like they were about to burst through his skin as he fought for his life.

At 200 knots I saw his arms pulled up in front of his face and he was clawing behind his head. For a moment I thought he was going to manage to pull the handle and get clear of the plane. I was mentally cheering for him. His arms got yanked down by the blast and I cursed as I checked my radio selector switch in radio 1.

"Mayday, Mayday, this is 515. My BN has partially ejected. I need an emergency pull-forward!"

The reply was an immediate, "Roger, switch button six."

I switched freqs and said (or maybe yelled), "Boss, this is 515. My BN has partially ejected. I need an emergency pull-forward!"

I slapped the gear handle down and turned all my dumps on (in an effort to get slower, max trap never

crossed my mind).

The Boss came back in his ever-calm voice and said, "Bring it on in."

As I watched the indexers move from on-speed to a green chevron I worked the nose to keep the plane as slow as possible and still flying. The plane was holding at around 160 knots and descending. My BN's legs were kicking, which gave me some comfort; he was not dead. But, watching his head and body jerked around in the wind blast, being literally beaten to death, made me ill.

I had been arcing around in my descent and was still at seven miles. The Boss came up and asked if the BN was still with the aircraft. I think that I caused a few cases of nausea when I answered, "Only his legs are still inside the cockpit." It made sense to me, but more than a few people who were listening had visions of two legs and lots of blood and no body. Fortunately, the Boss understood what I meant.

As I turned in astern the boat, I called the Boss and told him I was six miles behind the boat. I asked how the deck was coming. He asked if I was setting myself up for a straight-in.

I told him "yes." He told me to continue.

It was then I noticed that my BN had quit kicking. A chill shot through my body and I looked back at him. What I saw scared me even more. His head was turned to the left and laying on his left shoulder. He was starting to turn grey. Maybe he had broken his neck and was dead. Bringing back a body that was a friend only minutes before was not a comfortable thought. I forced myself not to look at my bombardier after that.

The front windscreen started to fog up about four miles behind the boat. I cranked the defog all the way and was getting ready to unstrap my shoulder harness so I could wipe off the glass when it finally started clearing.

I saw the boat making a hard left turn. I made some disparaging remarks about the guys on the bridge as I rolled right to chase centerline. I heard CAG paddles come up on the radio. He told the captain he would take the winds and that he needed to steady up. My tension eased slightly as I saw mother begin to leave her wake in a straight line.

I was driving it in at about 300 feet. I had been in a slight descent and wasn't willing to add enough power to climb back up to a normal straight-in altitude for fear I would have to accelerate and do more damage to my already battered BN. I watched the ball move up to red and then move slowly up towards the center. Paddles called for some right rudder and told me not to go high. My

scan went immediately to the 1-wire.

I had no intention of passing up any "perfectly good wires." I touched down short of the 1-wire and sucked the throttles to idle. The canopy shards directly in front of the BN's chest looked like a butcher's knife collection. I was very concerned that the deceleration of the trap was going to throw him into the jagged edge of the canopy. I cringed when I didn't immediately feel the tug of the wire. I pulled the stick into my lap as paddles was calling for attitude. I got the nose gear off the deck and then felt the hook catch a wire.

I breathed a sigh of relief. Testing the spool-up time of a pair of J-52s as I rolled off the end of the angle was not the way I wanted to end an already bad hop.

As soon as I stopped, I set the parking brake and a yellow shirt gave me the signal to kill my no. 2 engine. Immediately after that I heard a call over the radio that I was chocked. I killed no. 1 and began unstrapping. As soon as I was free of my seat (I somehow remembered to safe it), I reached over and safed the BN's lower handle, undid his lower koch fittings and reached up to try to safe his upper handle.

As I was crawling up, I saw that his upper handle was already safed. I started to release his upper koch fittings but decided they were holding him in and I didn't want him to fall against the razor-sharp plexiglas on his side.

I got back on my side of the cockpit, held his left arm and hand and waited for the medical people to arrive. I realized he still was alive when he said, "Am I on the flight deck?"

A wave of indescribable relief washed over me as I talked to him while the crash crew worked to truss him up and pull him out of the seat. Once he was clear of the plane, they towed me out of the landing area and parked me. A plane captain pumped the canopy open by hand far enough that I could squeeze out. I headed straight for medical without looking back at the plane.

Later, I found that ignorance can be bliss. I didn't know two things while I was flying. First, the BN's parachute had deployed and wrapped itself around the tail section of the plane. Second, the timing release mechanism had fired and released the BN from the seat. The only things keeping him in the plane were the parachute risers holding him against the back of the seat.

Our wildest "what if" scenarios are tame in comparison to what the next flight can hold. No matter where we are or what we are doing, things can go from being just great to disaster in, literally, the blink of an eye.

Lt. Baden received the Air Medal. – Ed. Lt. Baden is an A-6 pilot with VA-95.

What Can Go Wrong?

If we hadn't just been given two foul-deck waveoffs, it would've worked", I thought to myself as the fuel hose was being hooked up. Here we are, stage center, the nose of our Prowler pressed against the foul line, enviously watching the other two Prowlers get their CQ requirements, still just above hold-down fuel.

In the background, button 6 is clobbered by an E-2 with an unsafe nose gear. It sounds like they've got it fixed and are coming in for a straight-in.

On my left, my plane captain, sandwiched between me and an E-2, signals that our main bag is full. We quickly finish the last of our checks and tell the boss, "620 is up and ready with 45K."

At this point, I look down the landing area toward the groove only to see one of our Prowlers rolling through the 45 with the straight-in E-2 at his right 3 o'clock, both obviously intent on simultaneously occupying that point in space known as the "start." As they get close enough to look like they're doing a section approach, the Boss waves the Prowler off. The rest of the E-2's pass is uneventful.

With the E-2 now fouling the landing area, the second Prowler, which previously boltered, calls abeam at priority fuel.

"This should be interesting," we think. It becomes obvious that the E-2 won't be clear of the landing area, so the LSO waves off the priority Prowler. As they pass overhead, they tell the boss that their next pass is their bingo pass. I reflect on how nice it is to be safe on deck.

Our attention is now drawn to the director breaking us down. The Prowler that had the "simo run" with the E-2 traps and we are directed to taxi forward. Over my director's head, I can see the low-state Prowler rolling through the 45. As I release the brakes, the starboard engine of the E-2 to our immediate left begins to spin, their crew switch complete.

We feel frustrated at the foolishness of fouling the deck with the bingo-pass Prowler rolling into the groove. My director, although probably unaware of the fuel state of that Prowler, is obviously rushing to get us up to the bow and out of the landing area.

With large, rapid hand movements, he gives us the right-turn signal. After our plane is through about 60 degrees of turn, the director gives us an emergency stop signal. As I imagine the bingo-Prowler's frustration at seeing us parked in the landing area, the Boss urgently transmits, "601, shut down your starboard engine". That

was the E-2 we were next to. Paddles was next on the radio, transmitting, "Waveoff! Foul deck!" to 621.

As we were moved forward again, 621 received their bingo instructions. We assumed the E-2 had an engine fire.

Instead of spotting us to cat 1, the director sent us to elevator 1.

"Now what?" echoed through our cockpit. Always eager to pin our frustration on the ship, we rationalize, "The flight deck must not realize we need another trap."

A moment later, our troubleshooter plugged in and informed us of our true misfortune. The left edge of our horizontal stab had been chewed off, the victim of Hawkeye 601's starboard prop. Looking in the mirror, the damage that had been done 50 feet behind me became obvious. The tip of the port stab looked like a streamer from a kid's bicycle handlebar.

This incident happened during the first three hours of our first day of carrier operations.

The bingo-Prowler landed uneventfully at NAS Miramar and the "simo-run" Prowler crew had another interesting story to talk about. We were once again reminded that there's no such thing as "safe on deck". Our jet had an \$800 fiberglass stab tip destroyed while the prop of the E-2 was only nicked. The Hawkeye's prop had missed hitting unyielding Grumman iron by less than an inch. The image of a turning prop tearing itself apart on a crowded flight deck and decapitating some unsuspecting 20-year-old still haunts me.

Lt. Iovine flew EA-6Bs with VAQ-139. He is currently assigned to VX-5



7

ast January, the detachment I was on went out for a few weeks to work with the Allies. Our squadron was temporarily short of helicopter second-pilots. Thus, the det had deployed with three HACs and only one H2P. It was shaping up to be an enjoyable time at sea. We were scheduled for several good ports and the detachment had tons of flight time to burn. Our ship had a new commanding officer who was interested in seeing what the SH-60B could do.

The detachment operations officer and I—two of the three HACs—were scheduled for a day SSSC mission. The battlegroup had split up into opposing forces. Our Aegis was the flagship for a convoy of maritime prepositioning ships, and a couple of FFG7s and Spruances. The Canadians and Dutch had teamed up and moved off during the night to position themselves to attack our force. Our job was to use the mighty SH-60B to find and target the "enemy" before they could sink the valiant boys on the merchant ships.

It was a fairly nice day, scattered rain showers intermixed with blue skies. Winds were around 25 knots and the seas were running 8 to 10 feet—perfect weather for SSSC.

We headed out low, skimming across the waves at 50 feet to hide in the sea clutter. When we reached a rain shower we would climb and turn on the radar. Most of the showers were heavy enough to hide us from any probing air-search radars, but allowed us to get a clear picture on our radar. We were virtually undetectable and very successful using this tactic.

After about 90 minutes we had located the main body of the enemy force and had a targeting solution. We kept a constant track of our burn rate and bingo limit.

Mother reported a possible ESM



Two HACs and No Gas!

By Lt. Jeff Bruner



fix on the remainder of the enemy forces. We double-checked our fuel and maneuvered to approach datum from behind. At the farthest point we were 90 miles from homeplate. We kept the radar off and snuck in from up sun. Our contacts were just finishing an UNREP. We kept the radar off and used the gyro-stabilized binoculars to get a visual ID. We climbed and passed their coordinates. Four confirmed hits. Our ship's CO was very excited and congratulated us over the datalink. He was very impressed at what we had done. With the enemy swimming home we turned for mother. We figured 45 to 50 minutes of flying time till safe on deck. We recomputed our fuel and burn rate. It would be tight but we should be able to make it back with 900 pounds, 300 pounds above SOP.

In our excitement, we had failed to keep an eye on the winds, which had increased to 40 to 50 knots. We had also ended up directly downwind from mom.

"No problem," we assured ourselves. "We are both HACs and know what we are doing."

As we turned into the wind to head home, our burn rate skyrocketed. We reached the outer screen with about 600 pounds of fuel. We could have (should have) stopped at any one of the maritime prepositioning ships. But that would have required us to admit we had messed up. Worse, it meant we would have to tell someone we had messed up and ask for their help. We rolled final on homeplate with two fuel low lights and just over 300 pounds of fuel. Fair approach with a mediocre landing, but safe on deck. If we had had to wave off it would not have been pretty. We try to laugh about it now, but we've made sure it never happened

Lt. Bruner flies with HSL-51. He was with HSL-42 at the time of this story.

Do What You Have to, But Don't Lose the Copier! By LCdr. Pete Fyles



The six-month deployment to the Med is almost over. The fixed-wing aircraft flew off yesterday and this morning our squadron of six SH-3H Sea King helicopters are all spotted on deck, ready to go. Generally, the helos stay with the carrier until about an hour from the pier to provide SAR and last-minute logistics support. Although we've been packing up for a week, last night was still filled with last-minute preparation and planning. It didn't matter, because you never can sleep the night before a fly-off.

Before the brief, I start punching the numbers. We've been launching most of the deployment with 4,000-4,500 pounds of fuel, but this morning we're almost topped out at 5,300 pounds. The standard-mission crew is two pilots and two aircrew, but today we have three extra maintainers who will ride with us. They're there to help out in case we break down along the route. Along with the maintainers come bowsers, tool boxes, spare oil and hydraulic fluid. We always plan for 200 pounds per crew and pax, but on the flyoff, everyone has got the standard 50 pounds of luggage that they can't live one day without.

Last comes the crown jewel, the copier. No way it would survive an off-load and truck ride from Norfolk to Jax. So on the helo it goes.

Finally, we're manned up and ready to turn. We're at max gross, but we're ready. We were hoping for 20 knots across the deck, but the ship has entered the channel and can't maneuver very much. The Air Boss says 16 knots is the best we're going to get. No problem. I'm Dash 5 of the six-helo launch; I'll ask for a deck run and that will make up the difference.

We reach transitional lift at the time we cross the deck, but then we instantly lose our ground effect. The aircraft settles, but I finally milk it out to a 200-fpm climb. Everyone joins up, the lead makes the calls, we go to a loose trail, and begin our climb to 6,000 feet.

After what seems like an eternity, we reach altitude. Great, I think, it's all downhill from here. After a few minutes we start to fall behind the pack, so I push the nose over a bit, pull a little more collective and we start to close.

At 6,000 feet, the controls feel sloppy in the thinner air. Seems like you can count the blades going around. Suddenly the helo starts to pitch up and left. This isn't some sudden gust of wind; this is blade stall, retreating blade stall to be exact.

As a helicopter's forward velocity increases, the local velocity of the retreating blade decreases. The retreating blades must therefore increase their angle of attack to compensate for the lift lost because of the decrease in net flow over the airfoil. Like all blades or wings, if the angle of attack is increased too much, it will stall. The "Catch 22" is, as the retreating blade is stalling, the advancing blade is approaching supersonic velocity at the tip from the increases in net flow over the blade. This is called compressibility. Both phenomena—retreating blade stall and compressibility—cause an increase in power required.

NATOPS says to decrease one or more of the following: collective, severity of the maneuver, airspeed, or altitude. You can increase rotor rpm. Basically, anything that will decrease the load on the rotor head will help recover from retreating blade stall.

I slowly lower the collective and raise the nose about five degrees. I eventually level off and fly 10 knots less than the other aircraft. I radio the lead to let him know what had happened. I tell him we will catch him when we refuel for the second leg.

The early stage of retreating blade stall is not a critical emergency, but if you read it wrong and try to push the cyclic forward, it could become fully developed. Uncontrolled flight may follow.

LCdr. Fyles flies with HS-15.



The four A-7s launched on a training flight. All the aviators were senior pilots; the flight lead was an O-6. They had briefed the low-level, checked the weather and read the yellow sheets.

Arriving over the range, the Corsairs split into two sections, line abreast. The first section arrived early and flew the low-level at 350 knots instead of the briefed 450 knots.

The flight lead turned 45 degrees left of the planned easterly course because of clouds. He then decided to bypass checkpoint two and head for point three. However, clouds still obscured the route and the lead began a near-military climb to VFR conditions between the layers of cloud.

The lead's wingman slowly rejoined as they leveled off at 15,500 feet MSL. The flight lead looked toward his wingman, then turned his attention back to his own aircraft. He could see that his heading was oscillating on the HUD, and the HSI was showing a slight climb and right bank. He sensed an odd vibration in the airframe and when he checked his altimeter, it was unwinding through 12,500 feet MSL (7,300 feet AGL). Then he looked at his standby instruments, which showed a steep dive and decreasing altitude. He was now passing 10,000 feet (4,800 feet AGL).

The pilot began an unusual-attitude recovery with his

VSI pegged at 6,000 fpm. He could see the ground coming up but did not consider ejecting because he thought he was outside the envelope of his seat.

He began a maximum-G recovery and pulled out at an estimated 800-1,000 feet AGL. He shot back into the clouds and called his wingman. There was no response. He then radioed the leader of the second section to report the problem with his HUD and his spatial disorientation. The three pilots continued to call the fourth A-7 without success.

After returning to base, the pilots learned that the last Corsair had crashed, and that the pilot had been killed. The A-7 had hit the ground in a 40-degree dive, at 520 KIAS

Reconstructing the mishap, analysis showed that the mishap pilot's flight lead had added power to near-military as he aborted the route. Climbing back into the clouds, he then decided he needed an instrument clearance and leveled off at 15.500.

His malfunctioning instruments disoriented him, making him push his plane into a dive. His wingman dutifully followed. The lead first saw the ground at 3,000 feet, while he was in a 40-50-degree dive. However, although his wingman may have recognized the danger and began a recovery, he ran out of altitude and crashed.

Here is a new skipper's thoughts on wingmen and their responsibility to ask questions.

By Cdr. Greg Stearns

ea, though I fly through the valley of the shadow of death, I will fear no evil, because I trust my flight lead."

Flight leaders are so designated because they have the maturity, flight discipline, knowledge, and experience not only to fly their own aircraft, but also to lead others on training or operational missions. Every young aviator in the TACAIR community dreams about and works toward becoming a flight leader, be it of a section or division, or on an air-wing strike.

Along this path, the young aviator learns many things about his ability to fly his aircraft, about his knowledge of aircraft systems, and about tactics. He also learns that it can be in his best interest to speak up on occasion.

Some of my not-so-fond memories as a student naval aviator and fleet nugget are of times when my flight lead did not have complete situational awareness (SA). Consequently, he missed something important or made a mistake.

Some of my not-so-fond memories as a flight leader are when I did not have complete SA and missed something important or made a mistake.

Flight leaders may have experience, knowledge, and ability, but wingmen should not be mushrooms. You too have to become smart in the short time that you have been flying, and it is your obligation to provide timely advice when you see that your flight lead is doing something not quite right.

"Timely advice" means that if

something is happening that is jeopardizing the safety of your flight, you must speak up right then and there. If something occurs that does not require immediate attention, it is best to bring it up tactfully in the flight debrief.

With my philosophy on the table, it is time to expose some of those minor embarrassments to which you and I have been subject. I have

—briefed the wrong target coordinates, radio frequencies, and immediate-action emergency procedures.

—busted altitudes because I forgot to reset my altimeter or simply lost SA on where I was going.

—headed in the wrong direction, toward the wrong checkpoint, toward buffer zones and restricted airspace, and into "enemy" missile engagement zones.

—rolled in on the wrong target.

—run intercepts on friendly aircraft thinking they were the bad guys.

Granted, a good flight leader will not make mistakes very often. But he does make mistakes. I know. I was first designated a section leader 15 years ago, and I have seen quite a few mistakes, more importantly, I have made mistakes, too. In most cases, I caught my error and corrected it before it jeopardized others in my flight. In some cases, my wingman saved me.

A flight leader succeeds because he has all the information needed to lead his flight. However, you as a wingman sometimes have information that your flight lead does not have. Do not be afraid to share it.

Cdr. Stearns is the CO of VFA-146.

Cold EPs Are Better Than Cold Water



Power? No kidding! I've got both power levers two-blocked against the stops as I dead-stick across the landing area and settle below the angle toward the sea. Both T-56s have bogged down and believe me, you've never heard an aircraft so quiet.

We are taught from day one to "expect the unexpected." Indeed, most of our training in primary, advanced and the RAG is centered around emergency procedures and maintaining control when snakes start filling the cockpit. We can pull out the blue NATOPS, memorize the boldface steps, discuss EPs in the brief and practice them in the aircraft, but what does it mean to really know the procedures cold?

While a student naval aviator in primary, an instructor told me to practice EPs while bouncing a ball off the wall (much to the chagrin of my BOQ neighbor), and catching it alternately in my left and right hand. It doesn't do any good to study EPs in a comfortable chair in a quiet room if you can't recall them when things start happening fast in a cramped, noisy cockpit.

Repetition does pay off and you really do know your procedures cold when you find your hand automatically moving toward the proper switch or lever as steps pop up in your head. In many cases, you may have time to analyze and carefully think through each step but when seconds count, your ability to go to the "automatic mode" may mean life or death.

As an instructor in primary and the FRS, I emphasized that point to my students. A student could methodically recite his EPs with a straight face in the brief. But what counted was the airborne simulation with distractions that taxed hand-eye coordination. If you don't have to stop and think through each step, you can devote more time to the first step in any emergency situation—flying the aircraft.

You also have extra seconds to determine whether to eject, bail out or ditch, or choose a landing site and get out a distress call.

So there I was, with one engine feathered and the other windmilling. I eased the yoke forward as the aircraft



cleared the flight deck angle to maintain flying speed. With both power levers full forward and silence throughout the aircraft (except for my wildly beating heart), I needed that little bit of extra airspeed so that I could ditch the aircraft, in a controlled manner, clear of the ship.

I can't remember raising the gear or even opening the ditching hatches but I do remember notifying the three NFOs in the back, telling them "We're going in!" Out of the corner of my eye, my copilot, the aircraft commander, was a blur of activity on the engine-condition levers.

At about 40 feet above the water, I felt our rate of descent decrease slightly as the aircraft entered ground effect. With a little time to catch my breath now and look inside the aircraft, I noted that the landing gear handle was up. Glancing out through the open ditching hatch, anticipating my impending egress, I even had a momentary feeling of satisfaction that we had done all we could and would soon be safely out of the aircraft for a quick pick-up by the plane guard helo.

Feeling the aircraft begin to swerve, I noticed the port engine restarting. In less time than it takes to read this, I had enough power to save the bird from a watery demise. It took a while to regain enough flying speed to climb out of ground effect, but we were soon putting a comfortable distance between us and the lapping waves below.

Following a successful airstart on the starboard engine and a subsequent OK 3-wire at the back of the ship, my aircraft, crew and I were safely onboard.

After we looked at the PLAT film, we found that the entire episode, from initial indication of power loss to the point we were able to climb out of ground effect took only 24 seconds! I was only two weeks into my first fleet squadron, having met them mid-deployment. With FRS training still fresh in my memory, I was able to automatically execute critical steps in a compound emergency: dual-engine failure and ditching.

If my copilot and I had not reacted quickly, you would have read about this incident in a MIR.

LCdr. Collier flies with VAW-121.

Beware of the Black Hole!



By Lt. Barry Buss

irginia Beach on a warm sunny day in July. I envisioned watching tanned beauties lying on the beach soaking up the rays by day and prowling the nightclubs. Whap! A helmet slap from my HAC jarred me out of my daze and brought me back to the reality of moonless night 50 miles off the coast of Norfolk.

We were conducting fleet CQ. We had returned from a Med deployment less than three months ago and had now "volunteered" to crossdeck a four-aircraft detachment to an unfamiliar carrier to cover the plane-guard mission for 10 days.

That afternoon, I'd watched several whales and dozens of dolphins cavort in the Atlantic sunset. I'd flown an approach to an OK Spot-3 and landed onboard the flattop. Visions of chicken (standard dinner fare for the past week) and a hot mid-summer night's nap in my sauna-like stateroom had danced in my head as we'd prepared to shut down our SH-3H after a 3.5-hour flight.

Hold the phone. The Boss had directed us to hot pump and resume plane guard for approximately an hour as he had wanted to conduct more night CQ ops. Two hours later, my max boredom was rudely interrupted by the penalty headslap. My HAC enlightened me to a rapidly approaching line of thunderstorms, as the carrier headed for the darkest part of the storm. Our safe haven in Starboard Delta rapidly closed in and periodic flashes of lightning interrupted the pitch-black night.

Approach soon called for a PIREP, and when I advised them of the "light show" and boomers quickly closing our position, the ship decided to suspend flight ops. Great, only 20 more long minutes of boring holes in the dark.

Five minutes later, the winds had doubled to 40 knots, requiring us to crab 30 degrees to maintain track on the downwind leg. The ship's port side was relatively clear, while visibility on the starboard side had dropped to three miles. Our two salty crewman suddenly became quiet, pondering their fate at the hands of the pair of JOs piloting their Sea King.

We cursed each successive bolter as the turbulence and buffeting increased near the storm front. Sheets of rain and closing clouds soon restricted us to half-mile legs, requiring thirty-degree AOB turns that invited vertigo. We updated approach on the deteriorating weather, increased our altitude to 300 feet and briefly discussed hovering close aboard the bridge in the event weather closed in further. To compound matters, approach 15 voiced their displeasure at our coming within a half mile of final.

As we turned onto our outbound leg the winds picked up to nearly 50 knots. The aircraft buffeted slightly as we neared the ominous cloud. Suddenly, the Sea King dropped like it had fallen off a shelf. As the ringing in our ears from our second crewman's scream echoed in our helmets, I simultaneously pulled collective while the HAC called altitudes. The aircraft stabilized at 200 feet.

If I were an oceanographer I could recite weather phenomena regarding low pressure, air pockets and downdrafts associated with approaching storm fronts; however, the important lesson is that both pilots recognized the problem and took action. The decision to climb to 300 feet upon encountering turbulent weather gave us an extra margin of safety. Rapidly deteriorating weather can catch anyone by surprise. Weather changes frequently in the carrier environment and need to be transmitted immediately via PIREP in order to minimize their effect on fight ops.

Downdrafts and low-pressure phenomena can be encountered in marginal VFR conditions as well as IFR. Don't let the black hole swallow you or catch you by surprise.

Lt. Buss flies SH-3Hs with HS-15.

was sure nice to get back in the jet after a 15-day layoff. That morning I completed an emergency simulator and my immediate-action emergency test. Later, I was scheduled to fly a low-level. Everything in the brief went normally except the lead took a little extra time covering the basics, since we both had not flown in a while.

We manned up and taxied out to the runway. I felt that small rush of anticipation and adrenaline as I thought about finally getting airborne again. Lead gave me the thumbs-up and rolled. I started my clock, waited 10 seconds and advanced the power to MIL. All the engines instruments were in the green so I tapped full burner.

Both nozzles were good, passing 100 KIAS.

I said to myself, "I'm going flying unless something major happens." At approximately 120 KIAS, and accelerating fast, I noticed my visor was starting to fog slightly.

"That's OK," I thought. I had left the cockpit warmer than usual because of an AVAIR HOT caution that I had cleared by diverting air conditioning to the avionics. At power-up for takeoff, I had gotten the usual burst of cold air as the ECS system had come to full life. I figured the combination of a warm visor and the cold air had fogged my visor. But right then my primary concern was to get the jet airborne safely.

About five seconds after rotation my visor and cockpit went completely IFR. Now this was interesting! It wasn't fog; it was smoke, whitish-blue, and it was making my eyes water terribly.

Things started to happen fast. I gave my best impression of the blindfold cockpit test as I cleaned up the jet, did the boldface NATOPS steps, and told the lead I needed to go back and land because of smoke and fumes in the cockpit. He rogered, declared an emergency and gave me the lead.

I cracked my oxygen mask and smelled what I thought were JP-5 fumes. The smoke and fumes began to clear. Meanwhile, I was talking to departure, telling them that I was setting up for a straight-in to the left runway. My new wingman was telling base the facts as he checked me out. Next, I looked at the engine-instrument page to see if I had some engine problem that could be causing the smoke. Nothing.

I turned my center-line fuel tank from stop to normal transfer as my lead said to think about dumping. I rogered him as I turned the dumps on and reset my bingo bug to 6,000 pounds, which is just below max trap. I leveled off at 3,000 feet as I turned downwind for 32L and squawked 7700.

As soon as we switched to tower I told them we were at 10 miles downwind, squawking 7700, dragging the straightin for the left runway. Tower immediately cleared us to land on the left, asked us to call the gear. They kept quiet and allowed us to handle things.

As I dirtied up at six miles, I still hadn't decided whether both of my engines were running properly. I elected to make a half-flap approach. I wanted to cover myself in case an engine quit on short final. I didn't want to have to wave off,

A FOSSY Morn

requiring another lap around the pattern, single-engine with no idea what was wrong with the jet.

At three miles, dirty with the landing checks complete, I secured the dumps and checked my fuel...8,300 pounds! I couldn't believe that I still had too much fuel for a trap. Oh, well, I'd have to do a minimum-sink landing. At one mile, I told my lead I could take it from here, so he took a cut-away and climbed.

I told tower I had three down and locked and they confirmed that I was cleared to land on the left. I flew an OK centered- ball pass and added power at the in-close position just before touchdown. As the wheels hit the ground, I heard "deedle deedle" and saw the anti-skid caution. No problem. I matched the anti-skid switch as I realized that I wasn't slowing down very quickly. What airspeed had I landed with? The last airspeed I remembered seeing before touchdown was about 152 KIAS. That's fast! Full, back stick in for aerodynamic braking. A light touch on the brakes to confirm they're going to work when I need them. OK, they're good.



16

By Lt. Brian E. Haley

Now, be gentle with them, no anti-skid today. The 8-board already? Impossible, I still had 89 KIAS. Six thousand feet remaining, 67 KIAS left. This was going to be close. Ten KIAS decrease per 1,000 feet of runway. That meant I'd have about 10 KIAS at 0 feet of runway...not good! If I could just drop 10 KIAS quickly I'd feel OK. The 4-board, 55 KIAS. Decision time. The arresting gear was 2,000 feet away. I didn't want to take this bird flying again because I was still not sure the engines were good. The anti-skid? Maybe it would come back on. If not, I'd drop the hook and take the long field gear.

I flipped the switch ON at about 52 KIAS and 3,510 feet of runway remaining. (Yes, 3,510 feet. We measured the skid marks.) Both tires locked up shortly after I toggled the anti-skid switch, and shortly thereafter, the right mainmount tire blew out. I don't know if I increased brake pressure or an anti-skid transient locked the brakes as I toggled the switch.

As I quickly slowed down, I called the tower to told them that a tire had FODed the last 4,000 feet of runway.

With the flat tire, I was actually able to roll to a stop in the next-to-last turn-off, keeping the single available runway open, but partially FODed.

I learned many lessons that day as squadronmates and I played Monday-morning quarterbacks. Don't cycle the antiskid switch with brake pressure applied. If the situation and time permit, dump down to a light fuel weight. If in doubt, take the trap! If you don't take the trap and you're worried about getting the jet stopped on the runway, use as much aerodynamic braking as possible. It would have been nice if I had gone to full flaps after touchdown and used the speedbrake. In Hornets, it's easy to overlook the speedbrake because you don't use it very much when landing.

If you're rambling down the runway and you question your ability to stop, take off and try again. On that note, it's nice to have a takeoff distance in your head from the brief in order to safely calculate when you can get airborne again.

Don't assume you have a possible engine malfunction unless you have some supporting data (I didn't have any!). This assumption set me up for the half-flap (i.e., fast) approach. If you have multiple emergencies (assumed or otherwise) take a look at how they interact.

Spare time during an emergency is rare, but if you have it, think about the remaining portion of the flight until engine shut-down, and calculate how your present situation will affect SOP. There is a fine line between interaction and incorrect assumptions; be careful. In my case, half-flaps, heavy gross weights, hot temperatures and no anti-skid made this "routine" landing very interesting.

Lt. Haley flies with VFA-113.

17





efore
I qualified as a
flight engineer, I learned two
valuable lessons: know NATOPS
and never rush. During my first tour
as an FE under instruction, our crew
deployed to Kadena. We had the
"ready alert." We had completed our
preflight and were resting when the
call came.

"Launch the ready!"

The mission could be anything from tracking a Soviet sub to a medevac. It turned out to be picking up eight Navy divers and transporting them to a crash site.

We flew to Nagasaki and made an overweight landing. (No one thought about down-loading our full load of sonobuoys.) It was 1910 and the airport closes at 2030. Where were the divers? The officers left to find them, while the FE and I made our walk-around in a cold drizzle. For safety's sake, we had secured the AOA- and pitot-probe heaters.

2010. Still no divers. 2015. Finally, the pilots returned with the divers and their gear. All had double tanks—an estimated 50 pounds each, the heaviest 50 pounds I'd ever lifted. The weight was starting to become a factor. The buoys had to stay on board since this was a

civilian airport.

We were in overdrive now.

Only five minutes to get out of there.

The qualified FE was in the seat. No time for training now. Meanwhile, the off-duty pilot consulted the takeoff performance charts while I computed the weight-and-balance.

We started the engines without a lineman—a little unusual, even for a new-be like me. Our starboard landing light went out as we taxied. Gotta go! Off at 2030!

Climb checklist complete, and things began to settle down. Then the ordnanceman directed everyone's attention to the red "sono disable" light. The sono-disable door was open and flapping in the breeze—possibly TFOA. Nothing we could do now. How could all these things have gone wrong?

In FE school, you reset a circuit breaker and everything is fine. The FE in the seat was busy throwing de-icing switches. The airspeed started dropping as we passed 13,000 feet, which is normal for heavy icing.

Then airspeed drops to 180 KIAS, 160, 140, now everyone's watching. Finally 100 KIAS.

"Max power!" the PPC yells.

Both airspeed indicators drop to zero.

The pilot at the controls pushes into a dive that any jet jock would appreciate. That's what some crewmembers who were on the ceiling said. Life as an FE is exciting, but this was more than I bargained for.

Both altimeters clicked toward zero with incredible speed. The first two decades of my life passed before me as the PAC said, "Check pitot heat." All eyes were focused on the switch, still in the off position.

The first step in NATOPS on loss of airspeed indication is: check pitot heat.

After we talked to the divers, they said there was no hurry to get to their destination. They had two more days before they had to dive!

AEI Colvin flies with VP-40.

19

Just Another DOG DAY By LCdr. Mark Molidor

had just finished an early morning PMCF on one of our A-4s and had to hurry to the next brief. That afternoon I was going to be Dash 4 of a 2 V Unknown hop against some fleet F-14s. Since we only had one F-16N and I was Dash 4, it didn't take much to figure it was going to be another dog day.

The launch, rendezvous, and engagements went like clockwork and on this particular sortie the fleet Toms did surprisingly well. Everything went so smoothly that I was lulled into a false sense of security for the following chain of events.

We joined up as a 4-plane and crossed the beach bound for Miramar. Then my generator dropped off-line and wouldn't reset. Now, for anyone who has flown the Dog for awhile, this is a common occurrence and nothing to worry about. I deployed the emergency generator and pressed on.

I told my flight lead and he asked if everything was OK. We were in our long descent out of altitude for the break. So I said, "Yes" and closed the formation, even though I was having to maintain formation as Dash 4 using the emergency speedbrake handle.

The break went smoothly and all aircraft got ready to land. For some reason, I missed the wind check and as it happened, a Santa Anna had been brewing all morning to the east. The wind was from that direction now. These winds usually happen only a few times each year, and I was not expecting it. When I saw lead land on runway 24R with his wingman taking opposite sides of the runway as briefed, I had no idea of my impending dilemma. With 3,000 feet of interval on opposite sides of the runway, I landed on the right side of 24R only to get an immediate right wing up/drift left. I knew my spoilers wouldn't work but with normal winds and the long runway, that should be OK. *Not!*

I now had a 14-knot quartering tailwind, no spoilers, my radio just went off line, and I was barreling down on Dash 3! I was afraid if I tried to take it around, the thrust

would carry me into the back of Dash 3 before I could get airborne. While I was yelling frantically in the radios for Dash 3 to keep it rolling (to no avail), I raised the flaps, trying to control my right wing up/drift left. I was now in the center of the runway only 1,000 feet behind Dash 3 and closing fast.

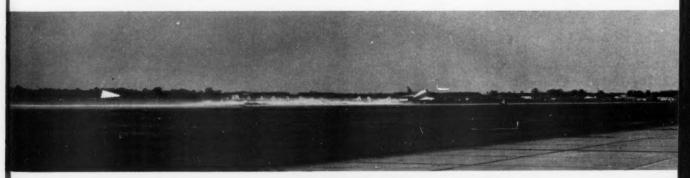
I was convinced I was going to tip over, go off the runway or run up Dash 3's tailpipe. One of the quickest ways to make your hair stand on the back of your neck is to be tilted on one side of an A-4 riding only two of your three tricycle gear.

Soon I was at Dash 3's dead six, 500 feet behind. I dropped the flaps again, dropped the hook, and engaged nosewheel steering (NWS wasn't going to help). At this time, someone saw my situation and told Dash 3 to keep rolling. At 200 feet dead six, Dash 3 started pulling away from me and moved over to the middle of the runway. As we approached the longfield gear (Dash 3 and myself almost side by side), it looked like I would be able to stop before the end of the runway. I raised the hook and slowly maneuvered away from the left edge of 24R using brake pressure. As we taxied off the runway, I felt like the luckiest man in the world. That was the scariest 30 seconds of my life. Taxiing back, the plane started to bounce funny and Dash 3 told me I needed to stop—I had a flat tire. That let me calm down.

Flying tactical jets is a dangerous job no matter what jet you fly or how much experience you have under your belt. Aviators can't relax when all is going well. I did. If you find yourself with a problem that has anything to do with controling your aircraft, set yourself up for a straightin on a long runway or simply take a trap.

Always be aware of your surroundings. If I had or heard about that quartering tailwind, I could have made better decisions.

LCdr. Molidor was assigned to NFWS at the time of this story. He is currently at VF-101 with orders to VF-142.



WIDS By Lt. Jeff Trent OIL TIPS BY LT. Jeff Trent OIL TIPS TIPS

our months into my second cruise and my log book was beginning look like it belonged to a seasoned aviator. Pretty soon I'd have two of them glued together, the true mark of someone who's "been there, done that." We had pulled out of port after a week of hard liberty. Mother got underway about two hours after her scheduled departure time because of zero-zero weather in the southern Arabian Gulf. I was scheduled to fly a functional check flight (FCF) soon after we left the harbor.

Although we had been operating in the Gulf for nearly three months, I knew this flight was going to be somewhat different. According to the CVIC brief, the ship was going to begin her transit east in preparation for the evening's run through the Straits of Hormuz. For those of you not familiar with the area, we had little room to operate and still avoid violating territorial airspace. Also, we were going to be launching within about 20 miles of the local international airport.

My copilot, another carrier-aircraft plane commander (CAPC), and I thoroughly briefed the mission because it had been eight days since our last flight. We placed particular emphasis on emergency procedures, and the engine shutdown and restart we were going to have to complete to satisfy the FCF requirements. We also discussed where we were going to fly in order to have a clear area.

After painstakingly reviewing the area JNC and FLIP

charts, we saw that the only place we'd be able to complete our FCF was overhead the ship. Normally, this wouldn't be a big deal on the first launch of the day. But today, the ship would be recovering about 20 aircraft returning from a detachment and these would be in the Case I overhead shortly after we launched. We discussed our options and decided to proceed north for about 20 miles, then turn back inbound and request an overhead altitude from Strike.

After launch, we stayed low and headed north. We talked to Strike and asked for "Angels 10, overhead Mother." The controller said that we would have to clear that with center. We called center who abruptly told us that we were climbing into the local approach corridor and that we needed to contact approach for flight following. He also said that his scope was saturated with contacts in our area and that he was unable to give us advisories. We had Strike on a radio in the back and switched the front radio to approach. Strike told us that the area around the ship was clear and to proceed overhead, but to once again contact center. We rogered the call and contacted approach. Shortly thereafter, we got the approach call. "Your ship is operating in our approach corridor. Tell them to keep all aircraft below 5,000 feet."

My copilot and I looked at our altimeters passing 5,500 feet and began our descent. Just as the nose came over I looked outside to read the airline logo emblazoned

on the fuselage of a 747 as it filled our windscreen. A hard (a relative term for an E-2 pilot) left turn enabled us to avoid the jumbo jet by about one half-mile and 500 feet.

We switched back to Strike, informed them of the traffic conflict and of approach's request to keep everyone below 5,000 feet. He replied that he had no other traffic in the area. This was as we watched the Boeing continue his approach.

Approach again told us to descend because his scope was saturated with contacts in the vicinity of the ship. Who should we believe? Acting like the conscientious—and shaken—aviators that we were, we decided to fly north, away from the city and complete our FCF paralleling the buffer zone. We made a "99" call to the returning

detachment players, telling them of the traffic conflict and altitude restriction. Then, we listened to a professional, yet frazzled, approach controller warning the commercial airliners of numerous incoming U.S. military aircraft.

The remainder of our flight was uneventful although we both kept our heads out of the cockpit and our eyes scanning the horizon.

What did we do wrong? Sure, we briefed the area considerations thoroughly and were well aware of the conflict with the civilian air traffic, but we should have had a concrete plan before we launched. Taking off and requesting a clear area from Strike is not always a safe bet. We weren't the only crew that hadn't flown in a week and perhaps should have anticipated everyone's proficiency (or lack of it) to be at the same level as ours.

Lt. Trent served with VAW-117. He is currently assigned to VAW-110.





Left to right: 1stLt. Stephen P. Holbrook, 1stLt. James M. Rudolf, Sgt. Jerry S. Hubbard

1stLt. Stephen P. Holbrook, USMC 1stLt. James M. Rudolf, USMC Sgt. Jerry S. Hubbard, USMC HMM-166(C)

After completing a one-hour PMC mission, the CH-46E headed back to USS Okinawa (LPH-3) for two hours of DLQs. As the helicopter passed 22 through the 90-degree position to spot 3, the cabin filled with smoke. Sgt. Hubbard (crew chief) called, "We're filling up with smoke. We're on fire!"

> Immediately, 1stLt. Rudolf (copilot) announced that they were losing power on the No. 1 engine. 1stLt. Holbrook (HAC) began a waveoff and gained single-engine airspeed (70 KIAS), while his copilot secured the

> As the Sea Knight continued upwind, the ship's SAR aircraft followed in trail. The tower reaffirmed that the aircraft's engine was smoking. The fire T-handle did not illuminate and Sgt. Hubbard couldn't confirm an engine fire. However, tower said that the smoke was getting worse. Based on the power loss on the No. 1 engine, and the reports from the tower. 1stLt. Holbrook decided to go through emergency procedures for an inflight engine fire.

> While the HAC stayed on the controls, his copilot went through the NATOPS procedures. The aircrew

then went through NATOPS for single-engine flight. The helicopter was off Okinawa's port bow when 1stLt. Holbrook declared an emergency and told the tower that the situation was under control.

He turned back toward the ship and the SAR aircraft, still in trail, now reported no smoke. Meanwhile, the ship had begun to clear the deck.

While on downwind, 1stLt. Holbrook told his copilot to open the NATOPS checklist and to make sure they had done the procedures for a single-engine shipboard landing. 1stLt. Holbrook then told his crew chief to complete the ditching preparations and to ready the life raft in case they had any more problems.

As the helo reached the abeam position, tower announced a ready deck and cleared the CH-46 for landing. Once established on final, 1stLt. Holbrook told 1stLt. Rudolf to monitor airspeed, Nr, and torque.

The helicopter crossed the deck edge at 25 feet and 35 knots, and landed. The No.1 engine is undergoing an engineering investigation, to determine the cause for the smoke and power loss.

> Capt. M.D. McEwen, USMC 1stLt. J.P. Wilson, USMC Cpl. A.M. Jones, USMC LCpl. S.G. Forrester, USMC HMM-364

Chatterbox 04 launched from NAS Cubi Point with eight passengers and cargo. Capt. McEwen (HAC) and 1stLt. Wilson (copilot) transitioned to forward flight from the HSL pad and moved out over the water.

With the aircraft passing 50 feet and 50 knots, the crew heard the loss of power and saw Ng, T5, Nf and torque indicators winding down. The No. 1 engine failed; a bearing in the accessory gearbox had failed which made the engine seize.

Capt. McEwen told 1stLt. Wilson, who was at the controls, to turn toward the field runway. The copilot declared an emergency and his intention to land. Capt. McEwen went through the NATOPS procedures for an in-flight engine failure. Cpl. Jones (crew chief) and LCpl. Forrester (first mech) secured the cabin and assisted

First Lieutenant Wilson maintained single-engine airspeed and made a run-on landing to Cubi's runway 25.

Left to right: Capt. M.D. McEwen, 1stLt. J.P. Wilson, LCpl. S.G. Forrester, Cpl. A.M. Jones



23

BRAVO ZULU

LCdr. Jon Flores Lt. Wes Fish AMEC Darryl Dunn HC-2

The VH-3A crew was on an instrument training flight. While level at 3,000 feet in IMC, the No. 1 engine failed. As LCdr. Flores (copilot) immediately applied full power to both engines, Lt. Fish (HAC) noticed that the Nr was dropping, and that their altitude was decreasing. He immediately entered an auto-rotation to regain Nr and establish single-engine airspeed.

LCdr. Flores squawked emergency and notified ATC, requesting vectors to the nearest airfield. With all rpm gauges on the No. 1 engine falling to zero, and T5 rising through 600 degrees, LCdr. Flores secured the failed engine.

Lt. Fish leveled off at 1,500 feet and checked power with AMEC Dunn backing him up on the gauges. The aircraft maintained altitude but remain IMC.

Chief Dunn broke out the NATOPS to continue backing up Lt. Fish while LCdr. Flores asked for a descent to VMC. Lt. Fish continued descending, breaking out at 400 feet, two miles from the airfield. He made a singleengine run-on landing.

Investigation revealed that the No.1 engine accessory section failed because of either a faulty radial or axial driveshaft.

Left to right: Lt. Wes Fish, AMEC Darryl Dunn Not pictured: LCdr. Jon Flores





Left to right: LCdr. Joe Rainey; Lt. Tom Gonzalez; Lt. Sam Kohler: AW1 Mike Worthington

LCdr. Joe Rainev Lt. Tom Gonzalez Lt. Sam Kohler **AW1 Mike Worthington**

HSL-44

Magnum 453 launched from USS Halvburton (FFG-40) for a routine dawn patrol. As soon as the SH-60 passed through safe single-engine airspeed, the crew heard a loud, highpitched whine coming from the vicinity of the No. 1 engine. Suspecting an impending high-speed shaft failure, LCdr. Rainey (HAC) took control, declared an emergency, directed the completion of the immediatelanding-ditching checklist, and made a left turn to downwind for an emergency landing.

As he started his turn, the caution light for the No. 1 hydraulic system lit up, followed by associated yaw kicks and the loss of the No.1 hydraulic system.

On short final, LCdr. Rainey began raising the nose when the No. 1 engine failed. Lt. Kohler, the det LSO onboard Halyburton, radioed that Magnum 453 had smoke and flames pouring from the engine. With Nr

dropping below 86 percent, torque on No. 2 engine at 135 percent, and the aircraft settling rapidly, the HAC waved off.

Lt. Gonzalez (copilot) dumped fuel and read off the gauges while LCdr. Rainey fought to remain in the air.

Meanwhile, AW1 Worthington monitored the fuel dump and completed the ditching checklist.

As the helicopter settled through 80 feet, the fuel dump finally took effect and the Nr began to build. LCdr. Rainey decided against ditching and set up for a single-engine approach.

Onboard Halyburton, Lt. Kohler cleared the rapid securing device from the flight deck while the OOD provided a steady deck with the best winds, LCdr. Rainey made a singleengine, no-hover approach and land-

The No. 1 high-speed shaft and the No. 1 engine had failed, damaging the input module.

approach/June 1992

that

Where Are the Lights?

Our squadron had to do a maintenance turn on one of our helicopters in the late evening. When we told our superiors that we needed permission because of the late hour, they told us to go ahead, but to not turn on the aircraft's lights so the people in the tower couldn't identify us. This action was in direct violation of one of the NAS instructions on aircraft noise abatement and control. I think that turning an aircraft at night without position lights also violates another instruction but I'm not sure which one.

More importantly, I feel that we violated safety rules, especially after we warned our command. Our maintenance department had been working long hours for a week and everyone was tired. Luckily, no one was hurt – this time. However, if we continue to break safety rules over the objections of the troops, somebody is bound to suffer.

Doingitinthedarkmouse

Besides the NAS instruction, the turnup violated OPNAVINST 3710.7N. Under Chapter 5, Aircraft Lighting, both position lights and anticollision lights shall be displayed at all times when the aircraft engine(s) is in operation.

This squadron apparently willfully ignored higher directives and makes us wonder what other instructions they may have deemed inconvenient and thus not applicable to them. If the supervisors in this squadron don't change their attitudes, the next correspondence we see about them might be a mishap report.

Loss of First-Stage Hydraulics and Common Sense

Our squadron recently flew an aircraft that was down. The helicopter was part of a det and after the crew took off from an OLF, they saw the pressure on the first-stage hydraulics drop from 3,000 psi to 2,000 psi.

The pilot called the tower and landed. After shutdown, the crew discovered hydraulic fluid in an accessory gearbox and hydraulics compartments. The first-stage reservoir was also in the red; the aircraft had an unknown, first-stage hydraulic leak.

Troubleshooters arrived at the OLF, but they couldn't find the leak because they didn't have a hydraulic jenny to pressurize the system. A jenny could have been flown or driven out to the field from another base. Instead, the crew flew the helicopter back to the det's field, where another inspection revealed that the leak was in the line from the first-stage hydraulic pump to the pressure transmitter.

NATOPS says that you should land as soon as possible with a depleted supply of hydraulic fluid. This crew took off again with the same emergency condition. If the hydraulic system had lost all of its fluid on the return flight, the first-stage pump might have failed. This failure could have meant the loss of the other two hydraulic systems and complete loss of electrical power, and perhaps the loss of the helicopter and crew.

When this story came back to the squadron, most of the enlisted members of the det, from the maintenance-control chief on down, were upset. I can't believe that we would take such a chance. The flight was against NATOPS, against established safety procedures and plain common sense.

Can'tbelieveitmouse

Smokin'? Not in My Corps!

Do SECNAV Instructions apply to everyone or not? COMNAVAIRPACINST 5100.13 references SECNAV Washington, D.C. 281750Z Jul 86 and SECNAVINST 5100.13A. The subject is: Tobacco Prevention Program For the Force.

Paragraph 4.0(2) says "Due to the combined impact of distraction, the impairment of physical skills and potential damage to sensitive equipment (particularly electronics), smoking aboard all NAVAIRPAC aircraft is prohibited."

When this instruction came out, I was working in the wing's operations department. I showed the instruction to the Wing Environmental Health officer and the Aviation Safety Officer. I said that the group and squadron COs would not follow the instruction unless the wing reemphasized it and incorporated it into the wing's own order.

The two officers agreed that the instruction should be followed, but after the CG's office reviewed it, I was told that the order didn't apply to the MAW and would not be endorsed or enforced.

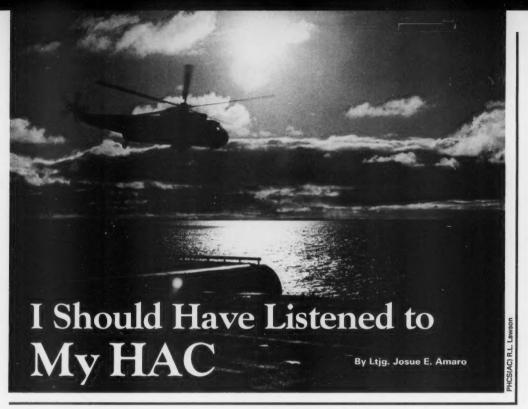
Does the instruction apply? If it does, why isn't it enforced?

Nosmokinmouse

No, AIRPAC instructions don't apply to FMFPAC, but SECNAV instructions do! There is no Navy-Marine Corps policy prohibiting smoking aboard Navy or Marine aircraft. The decision to forbid smoking aboard individual aircraft has been left to the TYCOMs, and only certain segments of the Navy have an established policy.

There is no longer any doubt about the effects of smoking, not only on people, but also on equipment. The Naval Safety Center is a non-smoking command and is solidly behind anti-smoking campaigns. -Ed.

approach/June 1992



A ave you ever asked why certain aircraft procedures are required, and the answer is "because that's what NATOPS says"?

Knowing your procedures is very important, but so is knowing when you may have to deviate from those procedures. This includes not only emergency procedures, but normal procedures as well, like starting engines or departing the CV on a very dark night.

Before a flight during a very intense workup period, I recited a standard NATOPS crew brief, covered the basics and threw in an additional "what if" to keep it interesting. After the brief we preflighted our H-3 and manned up.

We completed our checklists and waited for the H-3 spotted ahead of us on the angle to launch. As it departed, I picked up my scan and prepared for departure, taking into consideration that Dash 1 would require a little extra time for adequate separation. When I was satisfied, I told my crew and lifted off. Once we

completed the hover checks, I departed.

NATOPS requires that night departures proceed straight ahead to 60 knots and 300 feet before making any turns. As we climbed and accelerated my HAC called, "Turn left."

The radar altimeter indicated only 200 feet and I thought, "Another 100 feet before I can do that." I was about to correct my HAC when he said "Turn left. We're closing them." My first thought was, "Closing who?"

I lost my instrument scan while looking outside for traffic and did not notice that our airspeed was getting extremely slow. This is not a good situation for a heavy H-3. My HAC's next call was a little more excited, "Altitude!"

I came back to my instrument scan and found my altitude was decreasing so I added power and raised the nose to climb to 300 feet. Now my instrument scan was limited while I looked for our playmate and tried to figure out why I was descending.

After the altitude call, my HAC got on the controls with me. He again called "Altitude!", then added, "Airspeed!" I now realized that I was trying to fly a heavy H-3 at 20 KIAS out of ground effect on a hot night, a situation where power required exceeded power available.

My HAC concluded that I did not have a full understanding of the situation and took the controls. He adjusted the nose attitude and we started climbing again. After we landed and debriefed the incident, we found out that Dash 1 was flying his departure at an airspeed considerably slower than specified by NATOPS. Thus, with our aircraft accelerating to an airspeed greater than Dash 1's, we were closing too quickly.

I could have avoided this incident if I had listened to my HAC and turned left when he recommended. It was not strictly in compliance with NATOPS, but at the time, an early turn would have been the best course of action to avoid a near midair.

Ltjg. Amaro flies with HS-15.

26

hen you're not expecting to fly V IMC, at night, during blue water ops, even the basics can become difficult, especially if your only navigational equipment is a TACAN. We were flying a CH-46D on a VERTREP mission in the north Atlantic and were caught off guard when we inadvertently went IMC.

Although we were scheduled to start at 0600, our launch was

delayed until 1600 because of a cascading series of problems. This was my copilot's first major VERTREP and now I had only two hours of daylight to familiarize her with the VERTREP pattern. As night approached, I reemphasized the need for communication to keep everyone alert.

As the mission progressed, I noticed water on the windscreen. I wiped my hand on the windscreen to taste it and to figure out if it was rain (a fresh water wash that could reduce visibility) or salt spray (which could induce

a compressor stall and eventually an engine failure). It happened to be both; we were in and out of rain and fog and fighting a tail wind that was blowing salt spray on the deck. Even though the ships were alongside in the CONREP position, the weather quickly made the evening tedious and nerve-wracking.

Our helo seemed to get quieter, which happens when everyone is concentrating. Even the radios were quiet. The Air Boss's frequency was quiet because carrier ops were secured—I later found out because of weather. After about one hour of night time, I saw our sister aircraft going in for fuel on the carrier. No one in our aircraft heard a radio call so we suspected we had lost radio

communication and decided to land on our ship to trouble-shoot.

I transmitted our intentions in the blind and flew to our ship where the waveoff lights were on. We decided to hover off the starboard quarter of our ship, keeping the deck in sight. We couldn't talk to anyone and it was raining, foggy, and dark! We were preparing for landing when the weather went completely IMC. My copilot was on the controls as I watched our ship disappear. The next 10 minutes seemed like an eternity. At first, I was tempted to descend toward the ship. However, seeing zero airspeed with the ball pegged to one side while we were in the goo kept us from trying to fly it out VFR.

My copilot climbed, gained forward airspeed and

said she had vertigo. I thought of taking the controls but decided to back my copilot up with attitude calls instead. I called a crewman up to the cockpit to help call the attitude gyro and the ball. We gained altitude and began flying straight and level. I turned on the altitude-and-heading hold and started troubleshooting the radios. I eventually contacted control and tower and requested the ship's BRC. Control called radar contact and gave our position. We began a TACAN approach. I called tower for our BRC one final time and realized we were actually flying the approach 180 out.

As we approached 200 feet (TACAN mins), I told my copilot to slow to 40 knots and informed the crew that we would be facing the two ships if and when we broke out. Shortly thereafter we saw lights. It took me a couple of seconds to figure out which ship was which. As soon as I was convinced of our position in relation to our ship, I took the controls and flew the aircraft down the side of the ship. With my copilot backing me up on instruments, we finally landed.

During this flight we did some things wrong and some things right. As soon as my copilot didn't think we were straight and level—when we actually were—she admitted she had vertigo. I almost took the controls at that point,

but I didn't want us both to have vertigo. I calmly told her she would be fine.

Our crewmen helped her out the most. One crewman came up to the cockpit and immediately reassured us we had plenty of fuel and told my copilot what the attitude gyro was doing. The second crewman ensured everything was secured in the back for an emergency landing. The conversation in the aircraft was continuous and calm. The crewmen's help also let me figure out how to get us down and land without worrying about flying into the water. This workload arrangement worked well.

Shooting the TACAN approach backwards was obvously a major snafu. However, we were able to put the mistake aside and adapt to our new position.

Our crew out the most. came up to the immediately reported by the immediately reported

G.L. Gililland

Fixation on this mistake or any of the problems that evening could have been fatal. There was no reason to make the situation worse by getting annoyed with one another.

Although we set ourselves up, we're here to tell the tale because of good crew coordination. All the elements were there: leadership, communication, assertiveness, situational awareness, decision making, and mission analysis. In other words, the whole crew was involved, offered ideas and suggestions, and backed up the decisions made.

Lt. Williams is a HAC with HC-8

After turning on base leg, I couldn't find the landing area.

Mag. By Lt. Thomas D. Carr That Call That T

28



We were in the eastern Mediterranean twothirds of the way through cruise. Everyone was feeling comfortable with flying at night and operating at sea. We were beginning a multi-national joint exercise and wanted to practice our night EMCON procedures. After several successful day EMCON sessions, we decided the time was right to try it at night.

I was the flight lead for a night AIC sortie and thoroughly briefed our mission and night EMCON procedures (relaying some of the horror stories that I had heard from our more senior aviators within the squadron).

The launch and tactical portion of the flight went as briefed after which we checked in with the E-2 for recovery. Upon receiving a vector and data-link to our EMCON holding point, we split the section and proceeded to marshal. There were airspace restrictions to the east, and thunderstorms building up north, west and south of mother. I wondered if the weather would allow us to fly the scheduled EMCON recovery (the minimum requirements were: 3000/5). Some pilots were complaining about icing at their marshaling altitude. Although IFR at the time, I was below the freezing level and did not see any ice.

Pushing on time, I proceeded to where I expected the ship to be, backing myself up with the data-link. I ended up driving through several rain showers at 1,200 feet, following our EMCOM instructions. I felt very uncomfortable at this point and I should have called a "Knock it off." But, I didn't want to look like a non-hacker, so I continued inbound.

I flew to where I expected the ship to be and observed some lights and an aircraft strobe, which appeared to be a Hornet "on-the-ball". Relieved a little at this juncture, I motored toward the lights until I realized that they were a destroyer with a helicopter flying close aboard.

I turned my jet approximately 90 degrees and I finally saw the carrier, which was lit up like a Christmas tree with jets flying in various directions overhead. Picking my way through small rainshowers, I arced around until I found the stern of the ship and proceeded up the BRC.

As the air wing continued to arrive from several axes, two aircraft cut me out during the final turn to the BRC. I fell in behind them and, using the Hornet's INS, dropped a mark at the fantail, and applied course-line steering to reference the ship's heading. At this time I flew through another rainshower. The weather was definitely not 3,000/5, but none of the other 12 aircrew were complaining.

I saw another Hornet on downwind, judged him to be my interval and followed. Just as I dirtied up, another Hornet popped out of the clouds. I quickly switched to the anti-collision mode, turning away and climbing. Being a hacker, I still refused to call, "Knock it off!" I fell into the pattern behind an E-2 and decided to press on with the recovery.

After turning on base leg, I couldn't find the landing area. I rolled out on final bearing using my course-line steering. At about three miles behind the ship, the LSOs waived the E-2 off and told me to come hard left. I did not realize that the ship had turned 80 degrees starboard from the time I had turned crosswind (with no calls because of EMCON).

I reconfirmed my altitude bugs (life for the single-seat aviator) and went for the varsity play on final. Finally, I saw the drop lights, but no meatball. Calling "Clara", the LSOs told me to, "Keep it coming". I was in a rain shower again, trying to fly my best pass, as boltering would only extend this nightmare. I saw the ball at about a quarter mile and I landed with an OK 3. Just as I was rolling out, someone finally radioed "This is crazy. Knock it off!" at which time all the ship's systems were energized.

The debrief in CVIC was interesting as the aircrews filed through with their war stories. Luckily, we all recovered that night. I was happy to be alive but angry with myself for allowing a dangerous situation to continue unnecessarily. We have minimum weather requirements for a purpose and should abide by them at all times. There is no situation during peace time that should make us press the minimums. When it is time to say "knock it off,"key the mike and say it.

Fire Lights Off the

By Lt. Pete Thompson

Ave you ever had one of those days when nothing comes easy and everything is difficult and disorganized? I had one I won't forget. It started the morning of our fly-on and nearly ended in disaster off the cat working CQ. We've all been through it before: rushing to check out of the BOQ, problems getting transportation, and changes to the brief.

Finally we walked, preflighted, and started up, only to have the jet go down. Fortunately, the spare was ready, so we hurriedly stowed our gear, read the book on the ramp, did a rapid preflight, and strapped in. Forty-five minutes after our scheduled overhead time, we began rolling down the runway.

We cobbed the power, at last we had a chance to relax. That peace, however, was short-lived. As we checked in with Strike, the controller responded "Roger, your signal is buster!"

The pattern was empty and we were smokin'. Down we went for a nottoo-bad-for-being-rushed two-and-two. A hot refuel and pilot swap (my regular guy) came next. It was slow going since the deck was working stiffly after the long period in the yards, but my pilot seemed glad to see me. Maybe it was because we had spent a lot of time briefing fleet CQ together on previous hops; maybe it was because he had been stuck on the boat for the last two days.

With the checklist items in work, we began our taxi to cat 1. Being confident of his ball flying, I went through the remaining checklist items with a growing assurance that he could possibly become a top-ten player for the two-month cruise.

Configuration, altimeter, trim, seats, set-thebug, TACAN on; the last double check prior to tension was another warmand-fuzzy to build my growing euphoric bubble.

That bubble burst about two seconds off the cat. After checking high and right for traffic, I heard a voice somewhere announcing, "We've got fire lights!" Time froze.

"Any secondaries!?" I blurted out as I stared at all three red lights on the panel next to the gunsight.

"No, but all the fire lights are on!" the voice replied. More time crawled by.

"Gang bar off! Get the

The pattern was empty and we were smokin'.

gang bar off!" I managed to yell while scanning the engine instruments, ADI, and radalt.

"Boss, 501 off the cat has dual fire lights," my pilot called.

"What next?" I wondered.

"Who has fire lights?" the Boss asked.

"501. Make that multiple fire lights," the guy on my left answered. "Turning downwind and dumping."

A litany of verbal abuse from the Air Boss cleared all but one aircraft from the pattern. Once downwind, the checklist items came fast and

furious. I noticed the wide berth we seemed to be giving the ship and said, "Check left" between the challenge-and-reply items. By the time we were abeam, paddles was confirming no visual secondaries. The dumps were off, and I could hear the halon bottles purging as my pilot pressed the buttons. We watched our interval roll into the groove and wondered if they had heard our emergency call.

A tug on the straps followed a really great pass (no joke). The shutdown gaggle with the novice deck crew is all a memory now.

As it turned out, the indication was faulty. That, however, did nothing to lower my blood pressure. For my pilot, this had been his first hop at the boat in our squadron (welcome aboard) and he walked away with a reinforced belief of the hazards of flying at sea.

The emergency caught me by surprise. Reacting all morning, I hadn't really given much thought to a possible disaster later in the day. They say that trouble always comes when you least expect it. It sure did.

Lt. Thompson is a BN with VA-52.

"Boss,
501 off
the cat has
dual fire
lights..."

PH3 Douglas Mooney



approach/June 1992

Make

By Capt. Vince Huth, USN (Ret)

aybe, after weeks of planning a cross-country that includes airways navigation training and a lowlevel, culminating with a RON at a civilian airport, the CO finally gives his OK.

As you are trying to cash a check at the coffee mess en route to the line shack the CO asks, "Looks like a great trip. Anything unique about your civilian airport destination?"

"No sweat, skipper," you reply confidently. "An airport is an airport. Don't worry." (Wise skippers should always worry when someone says, "Don't worry.")

The CO asked a good question. Unfamiliarity with local procedures occasionally frustrates military aircrew using civilian airports. During planning, take the time to read all the remarks in the Enroute Supplement and perhaps call the airport for additional information. As a reminder, let's discuss operational procedures that are often misunderstood or overlooked at civilian airports.

Your destination airport may not have all the facilities or amenities you take for granted at military fields. The first important question is: can your aircraft operate at the intended destination? ILS, VOR and NDB are the prevalent arrival-departure navigation aids. Radar (ASR/ PAR) is seldom available or must be requested well in advance. Your TACAN-only war machine may be stuck with a VMC-only arrival restriction if equipped. Forget the mirror or lens; the VASI presenta- MIChard altitudes, limits on AB, and no touch-and-go's. A tion, if available, is a great preflight brief item.

Are the runways long enough and strong lighting to bear your aircraft's weight? Remember to check the capacity on that short runway in case you receive Open ENT pected ground handling. Arresting gear is selden again strong "request the break" if cleared for a sable, which should encourage an on-speed approach and "TOP Werfly Mom's house on departure. careful planning in case of a wet runway. How about fuel? The availability of military contract fuel guarantees that you can use the squadron credit card but the cost may be different than fuel purchased from your friendly supply officer. Asking the FBO to provide services such as VIP parking, use of the aircrew lounge, or transportation to the city and then not purchasing fuel is bad form. Do not

expect a quick response with a start cart from an FBO you tried to make into a non-profit organization. If you're at a modest-sized airport, don't count on the single starting unit being available. In an emergency you might be able to borrow air-carrier equipment but there could be a charge for their services. And the airline's schedule takes priority.

Be careful on all parking ramps. Not all parking areas on a civilian airport are stressed for large aircraft. Many general aviation ramps and taxiways have a 12,500pound weight limit. Older ramps were not subject to exacting design or construction standards, so you can expect a variety or unknown weight limitations ("Use spot 20. We parked a Convair there about a year ago with no problem.") That fine-looking asphalt overlay may be very thin and hide a former auto parking lot.

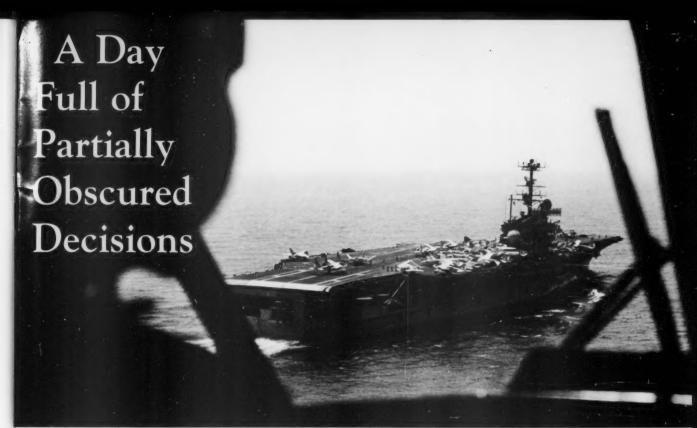
Don't expect all aircraft parking areas to be routinely swept. FOD is a concern to you and the airport management; ask the airport for special parking if you have a FODsensitive machine. When you park close to light aircraft, be considerate with your jet exhaust or prop wash.

If the airport serves airliners, there will be a designated commercial ramp. This area is a restricted area of the airport ("Ticketed passengers only, please"). Airport and FAA security will become quite upset (and unfriendly) if you are found wandering across the commercial ramp to the terminal restaurant. Be prepared for some detailed questions and an unscheduled delay if you are found on the commercial ramp in your camouflaged flight suit with anything that is, or looks like, a weapon.

Noise-abatement procedures exist at all airports, but are especially prevelant at many civilian airports, which are often located downtown or in close proximity to noise-sensitive areas. A military aircraft will get attention. Even if you comply with ATC, the perception of some public-spirited and vocal airport neighbors will be that you are lower, louder and more dangerous than other air traffic. A few local restrictions you should expect include curfews, no overhead approaches, higher-than-normal complete description of these restrictions may not be published in the FLIP. If the notes say, "fone arpt ops for noise abatement brief," please comply. You are probably calling to request a PPR anyway. Fight the temptation to "request the break" if cleared for a straight-in and to

It is great to see military aircraft at civilian airports. To make your visit trouble-free, read all the words in the planning documents and call the airport operations officer if you, or the skipper, have any questions. Airport management will appreciate it, and your skipper won't worry.

Capt. Huth is Chief of Operations and Maintenance for the Monterey Peninsula Airport District. His last Navy assignment was Director of Aviation Safety Programs at the Naval Postgraduate School.



JOCS Dick Benjamin

As we headed toward our dipping station, it became clear that the weather was getting worse.

By Lt. Michael L. Williams

The SDO's brief was normal except for the length of time he spent giving us the weather picture. The sky was partially obscured, 2,000 scattered, 3,000 broken, with visibility three nm in fog and haze. Not the best weather for ASW but we had seen worse. The SDO made it clear that we would encounter heavy downpours and turbulence, but that the ship was trying to go around the cell. My crew and I headed toward our aircraft, secure in the belief that we could avoid any nasty weather.

While preflighting, we noticed that the visibility was deteriorating, but that the ship was in a hard turn, trying to find clearer skies. The ship steadied up and we launched to assume single-helo screen delta.

As we headed toward our dipping station, it became clear that the weather was getting worse. I radioed the ship to tell them about the marginal weather ahead. My copilot began weaving through the

dense clouds, trying to remain VMC, but to no avail. Massive storm clouds were developing and we found ourselves enveloped in the thick mass. We were IMC and we immediately started our instrument scan.

I asked my copilot to climb from our altitude of 150 feet to 300 feet while I tried to contact the ship. It wasn't five seconds after he leveled off at 300 feet that we both noticed the masts of a smallboy directly beneath us!. At that point, we climbed to 500 feet, leveled off and tried to calm down.

We found a clearing a few moments later and got the ship to head in that direction.

We recovered safely three hours later and we told the other aircrews about our experience. It may seem like a big ocean and an even bigger sky, but there are obstacles out there. This particular needle in the haystack almost found us.

Lt. Williams flies with HS-15.



effect of OUALITY

Poster idea: Capt. W.J. Mooberry, US

